unit (CPU) 112, a program memory (ROM) 114, and stores channel-related data in a random-access memory (RAM) 116. RAM 116 may be either internal to, or external to, microprocessor 110, and may be of either the volatile or non-volatile type. The term "RAM" is also intended to include electrically-erasable programmable read only memory (EEPROM) 117. One skilled in the art will recognize that if volatile memory is utilized, that it may be desirable to use a suitable form of standby power (such as from STANDBY POWER SUPPLY 180) to preserve its contents when the receiver is turned off.

Microcomputer 110 also includes a timer 118 for providing timing signals as needed. Microcomputer (or controller) 110 generates a control signal for causing tuner control unit 104 to control tuner 102 to select a particular RF signal, in response to user-entered control signals from local keyboard 120 and from infrared (IR) receiver 122. IR receiver 122 is powered from Standby Power Supply 180 to be able to receive a command to turn-on the receiver.

Tuner 102 produces a signal at an intermediate frequency (IF) and applies it to a processing unit 130 comprising a video IF (VIF) amplifying stage, an AFT circuit, a video detector, and a sound IF (SIF) amplifying stage. Processing unit 130 produces a first baseband composite video signal (TV), and a sound carrier signal. The sound carrier signal is applied to an audio signal processor unit 135 which includes an audio detector and may include a stereo decoder. Audio signal processor unit 135 produces a first baseband audio signal and applies it to a speaker unit 136. Second baseband composite video signals and second baseband audio signals may be applied to VIDEO IN and AUDIO IN terminals from an external source.

The first and second baseband video signals (TV) are coupled to a video processor unit 155 (having a selection circuit not shown). Electrically-erasable programmable read only memory (EEPROM) 117 is coupled to controller 110, and serves as a non-volatile storage element for storing autoprogramming channel data, and user-entered channel data.

The processed video signal at the output of video signal processor unit 155, is applied to a Kine Driver Amplifier 156 for amplification and then applied to the guns of a color picture tube assembly 158 for display. The processed video signal at the output of video signal processor unit 155, is also applied to a Sync Separator unit 160 for separation of horizontal and vertical drive signals which are in turn applied to a deflection unit 170. The output signals from deflection unit 170 are applied to deflection coils of picture tube assembly 158 for controlling the deflection of its electron beam.

The television receiver may also include closed caption circuitry as follows. A Data Slicer 145 receives closed caption data at a first input from VIF/SIF amplifier and detector unit 130, and at a second input from the VIDEO IN terminal via a Video Switch 137 which selects the proper source of closed-caption data under control of controller 110. Data Slicer 145 supplies closed-caption data to Closed Caption OSD Processor 140 via lines 142 and 143. Data Slicer 145 supplies closed-caption status data (Newdata, Field 1) to controller 110. Under control of controller 110, via control line 141, Closed Caption OSD Processor 140 generates character signals, and applies them to an input of video signal processor 155, for inclusion in the processed video signal. Alternatively, Closed Caption OSD Processor 140 and Data Slicer 145 may be included in controller 110. As noted above, although either OSD circuitry or closed caption display circuitry may be used to display Caller-ID data, preferably the OSD circuitry is employed, as described below.

A Telephone Network Interface Unit 126 is coupled to an external telephone network via Tip (T) and Ring (R) terminals for receiving Caller-ID signals transmitted by the telephone service provider. Telephone Network Interface Unit 126 is also coupled to controller 110 for providing decoded Caller-ID signals for display on picture tube 158. Telephone Network Interface Unit 126 and controller 110 are both coupled to a source of standby power (SB) 180 so that Caller-ID signals may be processed even when the television receiver is switched off and incapable of displaying a picture. Telephone Network Interface Unit 126 continually monitors incoming telephone calls for Caller-ID signals transmitted between the first and second rings, and upon detection applies them to controller 110.

The television receiver 200 of FIG. 2 is showing a screen display 210 entitled Priority Caller List. Six entry areas of the list are shown 220, five of which contain data entered by a user. The five entries represent telephone numbers and names of various individuals whom the user desires to accord a priority status. When any of those five Caller-ID codes are detected in an incoming call, the OSD is controlled to place a message on the display screen of the television receiver, if the television receiver is switched on (i.e., active, and able to display a picture). Any other Caller-ID code will not cause the display of an on-screen Caller-ID message. A message 230 displayed at the bottom of the screen prompts the user to enter the telephone number and name of any other priority callers desired.

The television receiver 300 of FIG. 3 is showing a screen display 310 entitled Caller-ID List. Six entry areas of the list are shown 320, five of which contain data showing that five unanswered telephone calls were received. The four of the five entries represent telephone numbers and names of various individuals whom the user did not desire to accord a priority status. The fifth (Aunt Martha) is a priority caller, who called when the user was unavailable to answer the call. The Caller-ID list and the Priority Caller List are both caused to be displayed by accessing a caller ID menu, or by pressing a particular key of remote control unit 125.

The television receiver 400 of FIG. 4 is showing a screen display 410 of active video 460 with a Caller-ID message 470 superimposed on the active video. It is herein recognized that the caller ID message could also be displayed in a PIP inset, if desired. Note that the Caller-ID message indicates that an incoming call is being received, and note that the incoming call is from a priority caller (Grandma). In accordance with the subject invention, calls from non-priority callers are not displayed over the active video, so that the viewer is not interrupted by seemingly endless Caller-ID messages.

The flowchart of FIG. 5 shows how the discrimination between priority callers and non-priority callers is accomplished. The routine is entered at step 500 with currently received Caller-ID data. At step 510, controller 110 searches the data stored in memory which represents the priority caller data. A determination of a match is made at step 515. If the currently received data does not match a stored priority caller entry, then the NO path is taken to step 530, at which a determination is made as to whether or not the call has been answered. If not, the currently received Caller-ID data is stored (Step 535) in a portion of memory accessed by controller 110 to generate the Caller-ID list display of FIG. 3. The routine is then exited at step 540.

	Hits	Search Text
1	411	(stor$ or sav$) same (unanswer$ or on-hook or (on adj hook))
2	2754	(caller adj id) or (((calling adj name) or (calling adj party) or (calling adj number) or (calling adj line)) adj (id or identification$)) or cpid or cnid or clid
3	7	l1 same l2